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The mediating role of job satisfaction in the stressor-strain relationship among Chinese government employees

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In recent years, China has seen a sharp increase in job stress-related suicides among government employees. Existing research already identifies a stressor-strain relationship, although more studies are warranted to investigate how this relationship is played out among Chinese government employees. The Healthy Work Organization model posits that work adjustment (such as job satisfaction) can mediate the stressor-strain relationship. The purpose of this study is to examine the role of job satisfaction (as a mediator variable) in the relationship between job stressors and job strain among Chinese government employees. Convenience sampling was used to collect data among 505 government employees in Hangzhou, China. Online and face-to-face survey data were collected and analyzed in Mplus Version 8.3. Mediation analyses using the bootstrapping method revealed that job satisfaction fully mediated the effects of relationships and recognition and partially mediated the effect of home-work balance. However, it did not mediate the effect of personal responsibility. Given these findings, Chinese government agencies can boost job satisfaction by providing more supervisory support and career development opportunities and by reducing the interference of work with their employees' family life. These moves will likely reduce job stress-related mental and physical health symptoms.

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Introduction

Stressor–strain relationship. Civil servants across the world have been recognized as experiencing elevated levels of job dissatisfaction and more pronounced health issues when compared to their counterparts in the private sector. (Bogg and Cooper, 1995; Lallukka et al., 2008; Lopes et al., 2010). Within the East Asian context, characterized by its unique bureaucratic culture and values, civil servants are often perceived as being exceptionally obedient, yet they typically have less autonomy compared to their Western counterparts (Berman, 2010; Van der Wal and Yang, 2015). China initiated its civil service reform in the late 1980s, marked by the introduction of more competitive selection processes and performance criteria, as noted by Burns and Wang (2010). However, there has been a noticeable lack of extensive research investigating the consequences of this reform on the vast number of Chinese public sector workers, particularly in fields related to occupational health. Our study aims to address this gap by exploring the relationship between the escalating job demands faced by Chinese government employees and their health and mental health issues. Furthermore, we anticipate that our research findings will offer valuable insights for public sector organizations, not only in China but also in broader contexts, to enhance their career support systems. This, in turn, can serve to better safeguard and motivate employees, both in the Chinese context and beyond.

Job stress refers to the stress that employees face in their work environments. To understand the process of job stress, researchers have developed a theoretical framework that highlights the connection between job stressors and job strain: job stressors refer to stressful working conditions (Hurrell et al., 1998), while job strain represents the psychological and physiological reactions of workers to these stressors (Hurrell et al., 1998). This process is commonly referred to as the “stressor–strain” relationship in occupational health literature (e.g., Grant and Langan-Fox, 2007).

The number of job stress-related suicides has been increasing among Chinese government employees in recent years. For instance, Qian’s (2014) analysis of 109 government employee suicides found that 61% of them were due to heightened job stress and related health issues. To prevent such incidents, it is crucial to understand how the job stressor–strain relationship manifests among this population. This review examines the interrelationships between job stressors, job satisfaction, and job strain among Chinese government employees as well as workers in both the public and the private sectors outside of China.

Workers in the public sector often reported that they experienced the following stressors in their jobs: job demands and workload (Coffey et al., 2009; Løkke and Madsen, 2014), role ambiguity (D’Aleo et al., 2007; Jin et al., 2018), work relationships (D’Aleo et al., 2007), job dangerousness (Jin et al., 2018), and lack of autonomy (Løkke and Madsen, 2014), work–family conflict (Løkke and Madsen, 2014; Liu et al., 2017), lack of resources (Coffey et al., 2009), and unsupportive organizational culture (Coffey et al., 2009). Ongoing job stressors have been associated with job strain, leading to adverse mental and physical health outcomes such as anxiety, depressive symptoms, and musculoskeletal pain (Parslow et al., 2004; Marcatto et al., 2016).

Several studies have demonstrated that government employees who experience various job stressors have poorer health and mental health outcomes (Parslow et al., 2004; Marcatto et al., 2016). Chinese government employees who face job stressors have reported lower subjective well-being, lower quality of life, and more mental and physical health problems (Jia et al., 2014; Bao and Zhong, 2019; Zhang et al., 2019; Kong et al., 2020).

Job satisfaction as a potential mediator. Job satisfaction has been defined as an individual’s overall feelings about their job or

job experiences (Locke, 1976). Researchers have also identified job satisfaction as a multi-faceted construct that encompasses various job and organizational factors, such as salary, promotion opportunities, supervision, benefits, performance-based rewards, etc. (Spector, 1985).

The Healthy Work Organization Model proposes that job satisfaction has the potential to act as a mediator between job stressors and workers’ physical and mental health outcomes (Hart and Cooper, 2002; Vandenberg et al., 2002). According to the model, work adjustment, which includes job satisfaction, organizational commitment, psychological empowerment, and job stress, reflects workers’ subjective understanding of their work environment (Vandenberg et al., 2002). The model posits that all aspects of work adjustment, including job satisfaction, can play a mediating role in the relationship between the work environment and workers’ health and well-being (Silla and Gamero, 2014).

Many studies have provided potential evidence on the mediating role of job satisfaction (e.g., Li et al., 2020). On the one hand, studies have found that stressor dimensions such as role conflict, job demands, lack of rewards, lack of job control, and lack of supervisory support are associated with job satisfaction among workers in various professions and across both private and public sectors (Smith and Shields, 2013; Kim and Hopkins, 2017; Scanlan and Still, 2019; Yang et al., 2023). Among Chinese government employees, job stressors such as long work hours, lack of family–work balance, lack of peer support, and lack of work environment safety have been found to be linked to job satisfaction (Yang and Wang, 2013).

On the other hand, research shows that job satisfaction is strongly linked to workers’ mental and physical health outcomes, including life satisfaction, happiness, depression, anxiety, self-esteem, and physical illnesses (Faragher et al., 2005; Bowling et al., 2010). There is also evidence of a long-term effect of job satisfaction on health and mental health (Dirlam and Zheng, 2017). Studies on Chinese employees have found that job satisfaction is positively related to subjective well-being (Dou et al., 2016). Similarly, evidence supporting the protective role of job satisfaction on mental health exists among nurses, teachers, and other professionals from different countries (Feng et al., 2018; Ghawadra et al., 2019; Sironi, 2019; Pepe et al., 2021).

Our review found limited research on the mediating role of job satisfaction among Chinese government employees. While two studies examined this relationship, they were conducted outside of China and not among government employees (Silla and Gamero, 2014; Van Hoffen et al., 2021). Another study (Qiu et al., 2021) focused on job stress instead of job stressors and did not specifically examine government employees. Therefore, further research is needed to explore the mediating role of job satisfaction in the stressor–strain relationship among Chinese government employees.

This study. This study focuses on Chinese government employees and tests the mediating role of job satisfaction in the stressor–strain relationship. Our research questions are twofold: (1) Does job satisfaction mediate the relationship between job stressors and physical health outcomes? And (2) does job satisfaction mediate the relationship between job stressors and mental health outcomes? We hypothesize that job satisfaction will mediate both relationships.

Methods

Sampling and data collection procedures. This study was approved by the third author’s institution (#20190901) before starting the sampling process. We used the convenience sampling

strategy and recruited participants from different government agencies in Hangzhou, a large and well-developed city in East China. Given the practical difficulties documented in studies on employees in Chinese public sectors (Liu et al., 2015), we employed two sampling procedures. The first sampling procedure involved recruiting participants during face-to-face talks on professional growth given by one of the co-authors at training events held by different county-level government agencies in Hangzhou. Those who attended the training were informed of the research opportunity and invited to participate in the study. Those who agreed to participate filled out a paper-and-pencil survey at the end of the training. This method resulted in 278 participants.

We also included 227 master of public administration (MPA) students from three universities in Hangzhou, China. As part-time students, they were working in different government agencies and had at least three years of working experience at the time of the study. We recruited them by posting announcements in social media groups and providing a link to an online survey that was identical to the paper-and-pencil version. Participants had to give their consent to be included in the study. In total, we had a sample of 505 Chinese government employees by combining the two sampling procedures.

Measures. To measure job stressors, we used the sources of pressure scale (SPS) of the pressure management indicator (PMI) questionnaire (Williams and Cooper, 1998).

In a separate study (Yang et al., 2023), we utilized a combination of exploratory factor analysis and confirmatory factor analysis techniques to develop a shortened version of the SPS-PMI, which includes four subscales: relationships (5 items), home-work balance (4 items), recognition (3 items), and personal responsibility (3 items). Table 1 includes all the items of this shortened version of the SPS-PMI. In that particular study, we assessed the reliability, convergent validity, discriminant validity, and criterion validity of the chosen items within the four subscales (Yang et al., 2023). The outcomes of our analysis indicated that the 15-item SPS-PMI exhibits satisfactory levels of reliability and validity (Yang et al., 2023). An example item on the relationships subscale was “inadequate guidance and backup from superiors.” Participants rated each item on a Likert-type scale, ranging from 1 (very definitely is not a source) to 6 (very definitely is a source). We calculated the mean score for each subscale to measure the overall level of stressors. Higher scores mean higher levels of stressors. The reliability score for each subscale was high, ranging from 0.75 to 0.88.

The job satisfaction scale (JSS) and the physical health scale (PHS) of the PMI were also included in our study. The JSS has 12 items and measures job satisfaction on a Likert-type scale ranging from 1 (very dissatisfied) to 6 (very satisfied). Example items include “the degree to which you feel ‘motivated’ by your job” and “the way in which conflicts are resolved in your organization”. The PHS includes questions about the frequency of nine physical symptoms experienced in the last three months, such as “headaches”. Responses range from 1 (never) to 6 (very frequently). For both scales, we calculated the mean score of all items as an overall measure of job satisfaction and physical health, respectively. A higher score indicates higher job satisfaction or more physical health problems. In our sample, the internal consistency of the JSS and PHS was high, with Cronbach’s alpha equal to 0.94 and 0.88, respectively.

Mental health was measured by the 10-item Kessler Psychological Distress Scale (Kessler et al., 2002). The scale, known as the K10, has been widely used as a screening instrument to assess non-specific psychological distress including symptoms of

Table 1 Items on the 15-item sources of pressure scale.

Subscales	Items
Relationships	Inadequate guidance and backup from superiors. Lack of consultation and communication. Discrimination and favoritism. Feeling isolated. A lack of encouragement from superiors.
Home-work balance	My partner’s attitude towards my job and career. Demands my work makes on my relationship with my partner/children. Absence of stability or dependability in home life. Pursuing a career at the expense of home life.
Recognition	Unclear promotion prospects. An absence of any potential career advancement. Opportunities for personal development.
Personal responsibility	Dealing with ambiguous or ‘delicate’ situations. Making important decisions. Implications of the mistakes you make.

depression and anxiety in different populations and across different cultures. Previously, the K10 was validated in Chinese populations as a measure for depression and anxiety symptoms (Bu et al., 2017; Ren et al., 2021). An example item was “feeling tired up for no good reason.” All items were rated on a Likert-type scale ranging from 1 (not at all) to 6 (extremely strong). We computed the average score of the K10 as an overall measure of mental health symptoms. The higher the score, the higher the level of mental health problems. In our sample, Cronbach’s α for this scale was 0.95.

Finally, we included two demographic variables as covariates, namely workers’ sex, and age, both of which have been linked to job satisfaction in the literature (Al-Haroon and Al-Qahtani, 2019). Overtime work (measured by working more hours than supposed to work in one week) was included as another control variable because it is an indicator of job stressors. Finally, adverse life events (Has any major event happened to you in the last 3 months which has had a bad effect on you?) and life stress (Are you subject to any ongoing negative pressures which started more than 3 months ago and are still having an impact?) were included as covariates because they are likely to confound the effect of job stressors.

Analysis strategy. All analyses were conducted in Mplus Version 8.3, which is suitable for the path analysis. Mplus provides a bootstrapping method to test the significance of the mediation analysis. We chose Mplus over other statistical packages also because of its incorporation of full information maximum likelihood (FIML) to handle missing data. Following recommendations on mediation research (MacKinnon et al., 2004; Preacher and Hayes, 2004), we used the bootstrapping method with 5000 bootstrap resamples and bias-corrected confidence intervals (BC CI) to detect significant indirect effects. To determine whether a mediating effect was significant, we examined whether the BC CI contained 0 and considered the effect significant only if the confidence interval did not contain 0. Additionally, we referred to previous research (Zhao et al., 2010) to further define the nature of the mediation effect as either partial or full mediation.

Each item on the SPS had missing data, with the number of missing observations ranging from 3 to 9. Missing observations were present for eight out of the 12 items of the JSS (ranging from 1 to 6), six out of the nine items of the PHS (ranging from 1 to 2),

Table 2 Univariate statistics of all the variables in our study (N = 505).

	n	%	M (SD)	# of missing cases
Sex (male)	218	43.25		1
Age			34.78 (8.49)	12
Overtime work (Yes)	372	77.02		22
Adverse events (Yes)	51	10.12		1
Life stress (Yes)	190	38.31		9
Job stressors				
Relationships			3.52 (1.04)	16
Home-work balance			3.14 (1.15)	14
Recognition			3.62 (1.18)	9
Personal responsibility			3.53 (1.02)	7
Job satisfaction			3.78 (0.86)	13
Physical health			3.55 (0.92)	6
Mental health			3.01 (1.09)	4

and six out of 10 items of the K-10 (ranging from 1 to 2). In addition, our control variables, including sex, age, overtime work, adverse life events, and life stress, had missing observations, ranging from 1 to 22. In Mplus, full information maximum likelihood (FIML) was used to allow all cases to be retained and analyzed in our analyses. When reporting univariate statistics and bivariate correlations, we removed all cases with missing data.

Results

Univariate and bivariate analyses. Table 2 shows the univariate statistics of all the variables in our study. Most participants were female and worked overtime. About 10% reported adverse life events in the past three months and about 38% experienced life stress in the past three months. The mean age was 35 years (ranging from 22 to 70). All other continuous variables had a range of 1 to 6, except for job satisfaction, which ranged from 1.5 to 6.

Table 3 show the bivariate correlation between all study variables. All job stressor variables were positively correlated with physical and mental health problems (r ranging from 0.25 to 0.32; $p < 0.001$ for all); they were all negatively correlated with job satisfaction (r ranging from -0.11 to -0.28), except for home-work balance. Job satisfaction was negatively associated with physical and mental health problems ($r = -0.29, -0.31$, respectively; $p < 0.001$).

Mediation analyses. Before conducting mediation analyses, we used Harman’s Single-Factor Test to see whether a substantial amount of common method variance was present in the data (Aguirre-Urreta and Hu, 2019). Results suggested that the percentage of variance explained by one factor was 29%, which is below the 50% cutoff, suggesting the common method effect was not present. Figure 1 shows the standardized coefficients and p -values for the paths between the independent variables of job stressors (relationships, home-work balance, recognition, and personal responsibility), the mediator variable (job satisfaction), and the outcome variables (mental and physical health problems). It also shows the residual covariance between mental and physical health problems. All four paths from the independent variables to the mediator variable (job satisfaction) were significant, except for personal responsibility. The mediator variable, job satisfaction, was negatively associated with both outcome variables (mental and physical health problems). In terms of the paths from independent variables to outcome variables, home-work balance was associated with mental health problems; home-work balance

Table 3 Bivariate correlations between study variables.

	1	2	3	4	5	6	7	8	9	10	11
1. Sex	-										
2. Age	0.21***	-									
3. Overtime			-								
4. Life events			0.11**	-							
5. Life stress			0.12**	0.12**	-						
6. Job stressor 1		0.09*			0.25***	-					
7. Job stressor 2					0.15***	0.62***	-				
8. Job stressor 3					0.19***	0.61***	0.48***	-			
9. Job stressor 4					0.13**	0.62***	0.55***	0.60***	-		
10. Job satisfaction		-0.10*			-0.33***	-0.28***	0.27***	-0.26***	-0.11*	-	
11. Physical health		-0.14**		-0.19***	0.39***	0.29***	0.25***	0.26***	0.26***	-0.29***	-
12. Mental health		0.10*		0.13**	0.43***	0.29***	0.32***	0.27***	0.27***	-0.31***	0.71***

Note: Job stressor 1 = relationships, job stressor 2 = home-work balance, job stressor 3 = recognition, job stressor 4 = personal responsibility; * $p \leq 0.05$, ** $p \leq 0.01$, *** $p < 0.001$; non-significant results omitted.

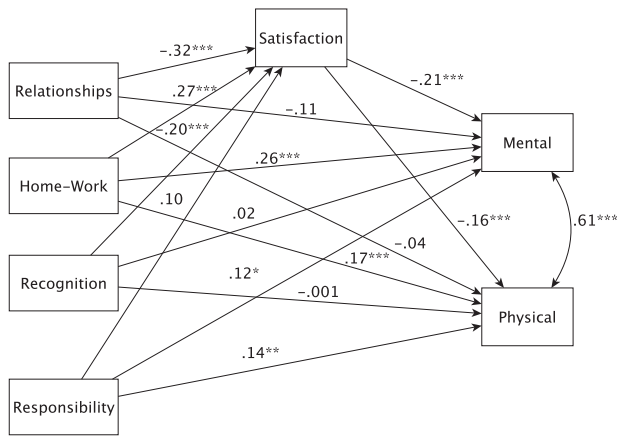


Fig. 1 Mediational relationships between job stressors, job satisfaction, and mental and physical health problems. Note: All coefficients are standardized estimates; Covariances between the four job stressors are omitted; results of all covariates are omitted; * $p \leq 0.05$, ** $p \leq 0.01$, *** $p < 0.001$. Variance explained: job satisfaction, 26%, physical health 27%, and mental health 31%.

and personal responsibility were associated with physical health problems.

Hypothesis 1 states that job satisfaction mediates between job stressors and physical health. Findings suggested that three indirect effects of job satisfaction on physical health problems were statistically significant: for relationships, $\beta = 0.05$, SE = 0.02, 95% BC CI = [0.019, 0.083]; for home-work balance, $\beta = -0.05$, SE = 0.02, 95% BC CI = [-0.068, -0.014]; for recognition, $\beta = 0.03$, SE = 0.01, 95% BC CI = [0.008, 0.051]; for personal responsibility, the indirect effect was not significant. Thus, hypothesis 1 was largely supported. Hypothesis 2 states that job satisfaction mediates between job stressors and mental health. Findings suggested that three out of the four indirect effects of job satisfaction on mental health problems were statistically significant: for relationships, $\beta = 0.07$, SE = 0.02, 95% BC CI = [0.037, 0.120]; for home-work balance, $\beta = -0.06$, SE = 0.02, 95% BC CI = [-0.093, -0.027]; for recognition, $\beta = 0.04$, SE = 0.02, 95% BC CI = [0.016, 0.076]; for personal responsibility, the indirect effect was not significant. Thus, hypothesis 2 was largely supported. Informed by previous research (Zhao et al., 2010), we concluded that (1) the effects of relationships and recognition were fully mediated by job satisfaction; (2) the effects of home-work balance were partially mediated by job satisfaction (more specifically, these were competitive mediation); and (3) there was no indirect effect of personal responsibility on mental or physical health.

In terms of the effects of covariates, adverse life events ($\beta = -0.13$, SE = 0.04, $p = 0.001$) and life stress ($\beta = -0.26$, SE = 0.04, $p < 0.001$) were associated with job satisfaction; overtime work ($\beta = 0.12$, SE = 0.04, $p = 0.006$), life stress ($\beta = 0.32$, SE = 0.04, $p < 0.001$), and age ($\beta = 0.08$, SE = 0.04, $p = 0.04$) were associated with mental health problems; overtime work ($\beta = 0.16$, SE = 0.04, $p < 0.001$), life stress ($\beta = 0.29$, SE = 0.04, $p < 0.001$), and being male ($\beta = -0.08$, SE = 0.04, $p = 0.03$) were associated with physical health problems. In addition, job satisfaction fully mediated the effect of adverse life events on mental health problems ($\beta = 0.03$, SE = 0.01, 95% BC CI = [0.010, 0.054]) and physical health problems ($\beta = 0.02$, SE = 0.01, 95% BC CI = [0.007, 0.044]). It also partially mediated the effect of life stress on mental health problems ($\beta = 0.05$, SE = 0.02, 95% BC CI = [0.028, 0.089]) and physical health problems ($\beta = 0.04$, SE = 0.01, 95% BC CI = [0.018, 0.073]).

Discussion

In our study, we aimed to investigate the effects of job stressors on job strain, both mental and physical health, among Chinese government employees. We focused on the role of job satisfaction as a mediator in this relationship. The study is significant because it responds to the need for research on stress among government employees in China. Moreover, while previous research mostly examined the impact of job stressors and job satisfaction on mental health, we looked at both mental and physical health outcomes. Finally, since job stressor is a multi-dimensional construct, we examined the effects of four measures of job stressors, including relationships, home-work balance, recognition, and personal responsibility, which can be another strength of our study. Mediation analyses using the bootstrapping method revealed that job satisfaction fully mediated the effects of relationships and recognition and partially mediated the effect of home-work balance. However, it did not mediate the effect of personal responsibility.

Previous research has identified a wide array of job stressors that are related to stressful work environments (Kalliath and Beck, 2001; Spielberger et al., 2003; McGilton et al., 2007; Tayfur and Arslan, 2013; Ju et al., 2018; Faisal et al., 2019). Examples of job stressors reported in these studies include lack of supervisory support, work-family conflict, lack of career development opportunities, and job demands. The four dimensions of the job stressor included in our study resemble those reported in the literature. For instance, the relationships dimension as measured in our study is similar to the lack of supervisory support in the literature, the home-work balance (or lack of) dimension is similar to work-family conflict, the recognition (or lack of) dimension is similar to the lack of career development opportunities, and the personal responsibility dimension is similar to job demands.

Researchers have reported evidence of the direct association between job stressors, job satisfaction, and workers' physical and mental health symptoms (Faragher et al., 2005; Smith and Shields, 2013; Yang and Wang, 2013; Dirlam and Zheng, 2017). They have also found evidence of the mediating role of job satisfaction in the stressor-strain relationship (Silla and Gamero, 2014; Van Hoffen et al., 2021). Consistent with these previous studies, this study largely supports the direct relationships between job stressors, job satisfaction, and job strain, as well as the mediating role of job satisfaction in the stressor-strain relationship. Specifically, two of the four job stressor dimensions, relationships and lack of recognition, were negatively related to job satisfaction, which was negatively related to mental and physical health symptoms. Job satisfaction also partially mediated the effect of home-work balance. Thus, this study provides additional empirical evidence for the Healthy Work Organization model that views job satisfaction as a potential mediator between stressful work environments and workers' health and well-being (Vandenberg et al., 2002; Silla and Gamero, 2014).

It is worth noting that job satisfaction was positively associated with a lack of home-work balance. This is somewhat unexpected but could be explained by the potential interactions between home-work balance and other variables such as overtime work and life stress, as speculated by other researchers (Tayfur and Arslan, 2013). This finding also supports the claim that the relationship between the work environment and workers' health outcomes can be contradictory (Van Hoffen et al., 2021). Nevertheless, our study found that lack of home-work balance was positively related to mental and physical health problems in Chinese government employees, which is more aligned with existing research (Ju et al., 2018).

Another unexpected finding was that personal responsibility as a stressor dimension was not related to job satisfaction. This

could have to do with how this dimension was measured: different from more commonly used measures of job requirements (such as job demands), the dimension represents a more implicit aspect of job responsibilities that one can encounter in various job situations (e.g., making important decisions and dealing with delicate situations).

Limitations and directions for future research. One limitation of the current study is the non-representative sample of Chinese government employees. The participants were from Hangzhou, which is a more affluent area and mostly worked at the local government level. As a result, the study may not reflect the experiences of government employees working in other regions of China or at higher levels of government. To improve the generalizability of findings, future studies could use a multi-stage, cluster sampling procedure to obtain a more representative sample.

Secondly, the cross-sectional design of our study prevents us from drawing conclusions about causal relationships between the variables. While the relationship between job stressors and strain is well-established, the relationship between job satisfaction and mental and physical health outcomes is less clear. It is possible that mental and physical health outcomes contribute to one's experience at work, including job satisfaction (Weziak-Bialowska et al., 2020). Since our study did not establish any causal relationships between the variables, our findings should not be interpreted as such. Future longitudinal studies are needed to address this limitation.

Thirdly, our study did not collect data on other emotional experiences at work such as job burnout, which can be potential mediators in the stressor-strain relationship. One of these factors is job burnout, a widely researched construct that is often defined as a syndrome of emotional exhaustion and cynicism at work (Maslach and Jackson, 1981). In the literature, job burnout has been found to mediate the stressor-strain relationship (Van Hoffen et al., 2021). However, evidence on the mediating role of job burnout is also scarce. Future studies should consider the mediating role of both job satisfaction and job burnout to gain a more comprehensive understanding of the relationship between job stressors and workers' physical and mental health outcomes.

Conclusion. This study provided evidence that job satisfaction plays a mediating role in the stressor-strain relationship among Chinese government employees. Given these findings, Chinese government agencies can boost job satisfaction by providing more supervisory support and career development opportunities and by reducing the interference of work with their employees' family life. These moves are likely to improve employees' mental and physical health outcomes. Meanwhile, job satisfaction's more immediate effect on health is not to be overlooked. Based on previous research (Spector, 1985), salary and benefits, intangible rewards, operating procedures, and communication could play an indispensable role in further boosting job satisfaction in the Chinese context. Although this study focused on government employees in China, these findings could potentially be relevant to Chinese private sectors and even Western contexts. For instance, considering the growing prevalence of depression in the Chinese high-tech sector due to the pervasive overtime working culture, as highlighted by Tan (2022), our research indicates that job satisfaction could be used as a mediator to assess the strains experienced by tech workers and their overall health status. This approach may offer insights into how to indirectly enhance their working conditions and long-term benefits. Furthermore, in light of the rising prevalence of neoliberal managerialism in both the Chinese and Western public sectors, as identified by Van der Wal and Yang (2015), the cultivation of a shared service ethos and

values, as suggested by our findings, could render our research insights relevant not only to government employees in the Chinese context but also potentially applicable to their counterparts in Western contexts.

Data availability

The data are not publicly available due to privacy or ethical restrictions. The data that support the findings of this study are available on reasonable request from the corresponding author.

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Author contributions

YL contributed to the research design, data analysis, and writing of the original draft of this paper. FY contributed to the conceptualization, data acquisition, supervision, writing up, and editing of the original draft of this paper. WZ contributed to research design and data analysis. ZZ contributed to editing and reviewing the revised paper.

Competing interests

The authors declare no competing interests.

Ethical approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the School of Public Administration (#20190901) at the Zhejiang University of Technology, Hangzhou, China.

Informed consent

All participants were informed of the purpose and scope of the study and how the data would be used. They were also assured that their anonymity would be maintained and that no personal or identification information would be collected or disclosed. All participants gave their informed consent for inclusion before they participated in this research.

Additional information

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